

## **Amendments to the Claims**

This listing of claims will replace all prior versions, and listings, of claims in the application:

### **Listing of Claims**

1. (Currently amended) A method of manufacturing magnetic disks comprising a magnetic layer, a carbon-base protective layer, and a lubricating layer on a substrate, said lubricating layer including  $-\text{COOH}$  and/or  $-\text{CF}_2\text{COOH}$  atomic groups,

said method comprising preparing lubricant *c* by mixing lubricant *a* and lubricant *b*;

wherein lubricant *a* is prepared from a lubricant *alpha* comprising a compound denoted by chemical formula

#### **[Chem. 1]**

$\text{HO}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{O}-\text{CH}_2-\text{CF}_2(-\text{O}-\text{C}_2\text{F}_4)_p(-\text{O}-\text{CF}_2)_q-\text{O}-\text{CF}_2-\text{CH}_2-\text{O}-\text{CH}_2-\text{CH}(\text{OH})-\text{CH}_2-\text{OH}$

wherein *p* and *q* are natural number,  
and a compound denoted by chemical formula

#### **[Chem. 2]**

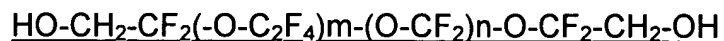
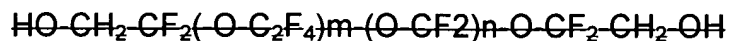
~~$\text{HO}-\text{CH}_2-\text{CF}_2(-\text{O}-\text{C}_2\text{F}_4)_m(-\text{O}-\text{CF}_2)_n-\text{O}-\text{CF}_2-\text{CH}_2-\text{OH}$~~

$\text{HO}-\text{CH}_2-\text{CF}_2(-\text{O}-\text{C}_2\text{F}_4)_m(-\text{O}-\text{CF}_2)_n-\text{O}-\text{CF}_2-\text{CH}_2-\text{OH}$

wherein *m* and *n* are natural number,  
are fractionated by molecular weight to prepare the lubricant *a* having a weight average molecular weight (*M<sub>w</sub>*) of from 3,000 to 7,000 and a molecular weight dispersion of less than or equal to 1.2;

the a lubricant *beta* prepared from a compound denoted by the chemical formula

**[Chem. 3]**



wherein m and n are natural number,

fractionated by molecular weight to prepare the lubricant *b* having a weight average molecular weight (Mw) of from 2,000 to 5,000 and a molecular weight dispersion of less than or equal to 1.2;

and

a film of lubricant *c* is formed on the carbon-base protective layer to form the lubricating layer.

2. (Original) The method of manufacturing magnetic disks of claim 1, wherein the fractionation by molecular weight is conducted by supercritical extraction.

3. (Previously presented) The method of manufacturing magnetic disks of claim 1, wherein lubricant *c* is prepared by obtaining a composition A of lubricant *a* dispersed in a fluorine-base solvent, obtaining a composition B of lubricant *b* dispersed in a fluorine-base solvent, mixing compositions A and B, and extracting lubricant *c* from the mixed composition.

4 (Currently amended) The method of manufacturing magnetic disks of claim 1, wherein after forming the lubricating layer, the resultant magnetic disk is exposed to an

atmosphere of from 50 to 150°C to adhere lubricant c to the carbon-base protective layer.

5. (Currently amended) The method of manufacturing magnetic disks of claim 1, wherein the carbon-base protective layer is formed by plasma CVD.

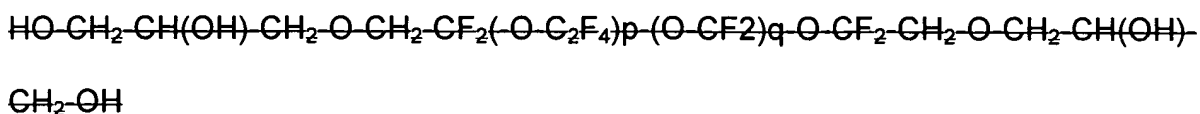
6. (Previously presented) A load-unload system magnetic disk device comprising a magnetic disk manufactured by the process of claim 1.

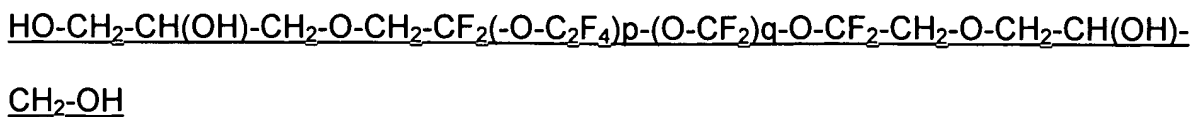
7. (Canceled)

8. (Currently amended) A magnetic disk comprising a magnetic layer, a carbon-base protective layer, and a lubricating layer on a substrate, said lubricating layer including  $-\text{COOH}$  and/or  $-\text{CF}_2\text{COOH}$  atomic groups, in which the lubricating layer has been formed on the carbon-base protective layer, said lubricating layer being comprised of a lubricant c,  
said lubricant c comprising:

a lubricant a having a weight average molecular weight (Mw) of from 3,000 to 7,000 and a molecular weight dispersion of less than or equal to 1.2 obtained by refining a lubricant *alpha* comprising the compound denoted by the chemical formula

**[Chem. 4]**

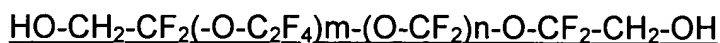
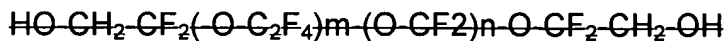




wherein p and q are natural number,

and a compound denoted by chemical formula

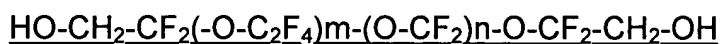
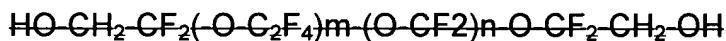
**[Chem. 5]**



wherein m and n are natural number,

and a lubricant *b* having a weight average molecular weight (Mw) of from 2,000 to 5,000 and a molecular weight dispersion of less than or equal to 1.2, comprising a lubricant *beta* comprising a compound denoted by chemical formula

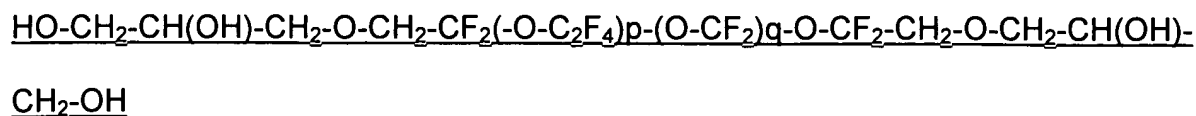
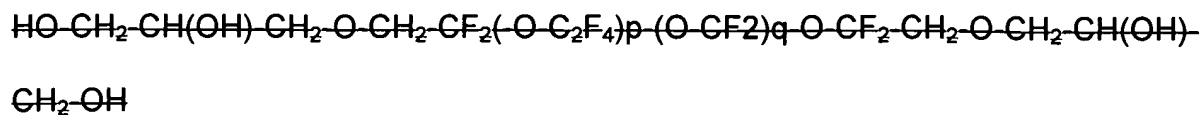
**[Chem. 6] .**



wherein m and n are natural number.

9. (Currently amended) A magnetic disk comprising a magnetic layer, a carbon-base protective layer, and a lubricating layer on a substrate, in which the lubricating layer has been formed on the carbon-base protective layer, said lubricating layer comprising a compound denoted by the chemical formula

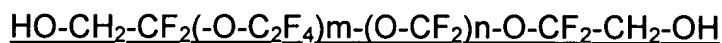
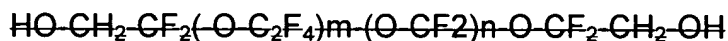
**[Chem. 7]**



wherein p and q are natural number,

and a compound denoted by the chemical formula

**[Chem. 8]**



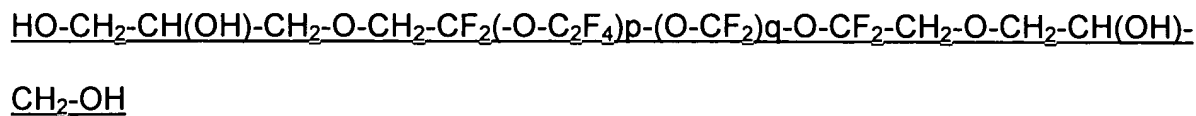
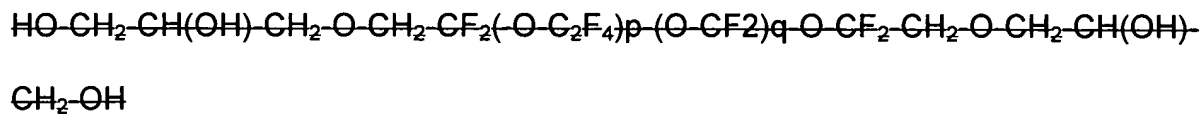
wherein m and n are natural number,

and the lubricating layer contains -COOH atomic groups detectable by time of flight secondary ion mass spectrometry.

10. (Currently amended) A magnetic disk comprising a magnetic layer, a carbon-base protective layer, and a lubricating layer on a substrate, in which the lubricating layer comprises:

a compound denoted by the chemical formula

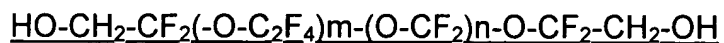
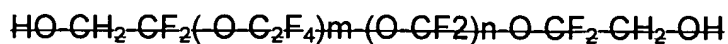
**[Chem. 9]**



wherein p and q are natural number,

a compound denoted by the chemical formula

**[Chem. 10]**



wherein m and n are natural number,

and a compound having in its molecular structure -COOH atomic group detectable by time of flight secondary ion mass spectrometry.

11-13. (Canceled)

14. (New) The magnetic disk of claim 9, wherein the lubricating layer includes -CF<sub>2</sub>COOH atomic groups.

15. (New) The magnetic disk of claim 10, wherein the lubricating layer includes -CF<sub>2</sub>COOH atomic groups.